Functional Specs

For *Flight of the Phoenix*

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Website

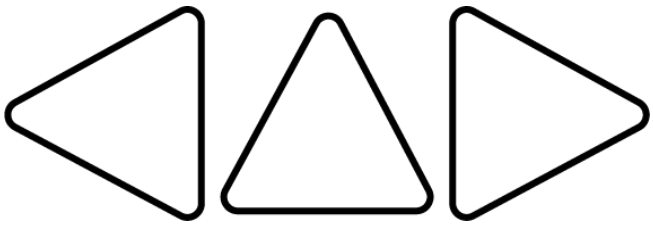
Visuals - The website will have a solid color background that compliments text and fits the theme. The website will also include solid color borders or patterns that compliments background and fits the theme.

Content - On the website's home page we will have an "About" section that will discuss our games plot and story, and introduce and explain our controls and mechanics. Along with the text, there will be pictures of concept art and real gameplay. The pictures will not be interactable and will be auto-scaled to fit the size of the screen.

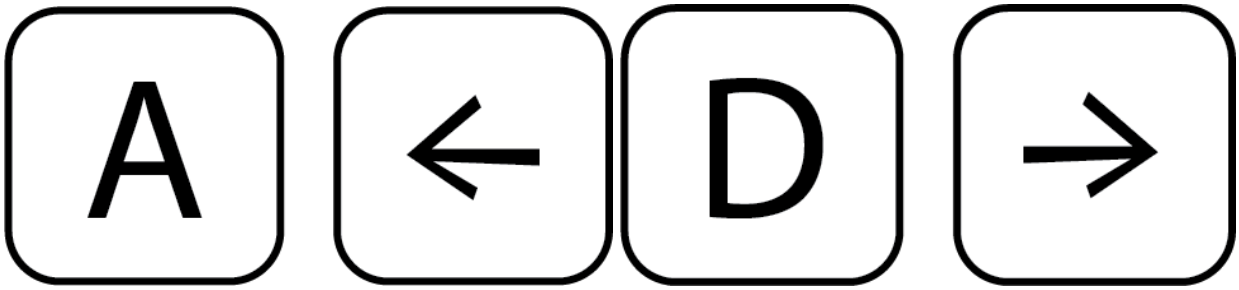
Link and Start - The website will have one main button to click which will transfer the player to the game to begin playing.

Controls

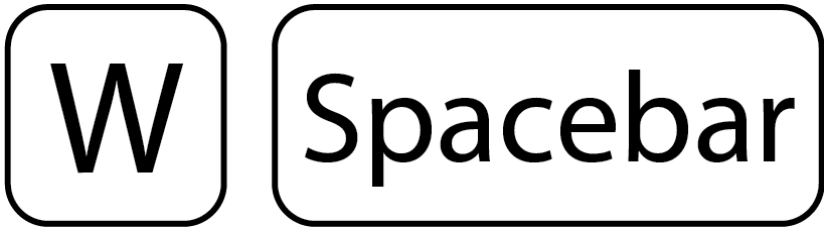
The game uses different input methods for player movement depending on the platform used. On computers, WASD and arrow keys are both viable inputs. On mobile, a DPad will be visible in the corner of the screen, and can be used to input movements, as seen below.



The player can move left or right by pressing buttons. On keyboard, keys A/Left Arrow for left, D/Right Arrow for right.On mobile, a DPad will be visible in the bottom left, and the left direction and right direction can be pushed for movement respectively.

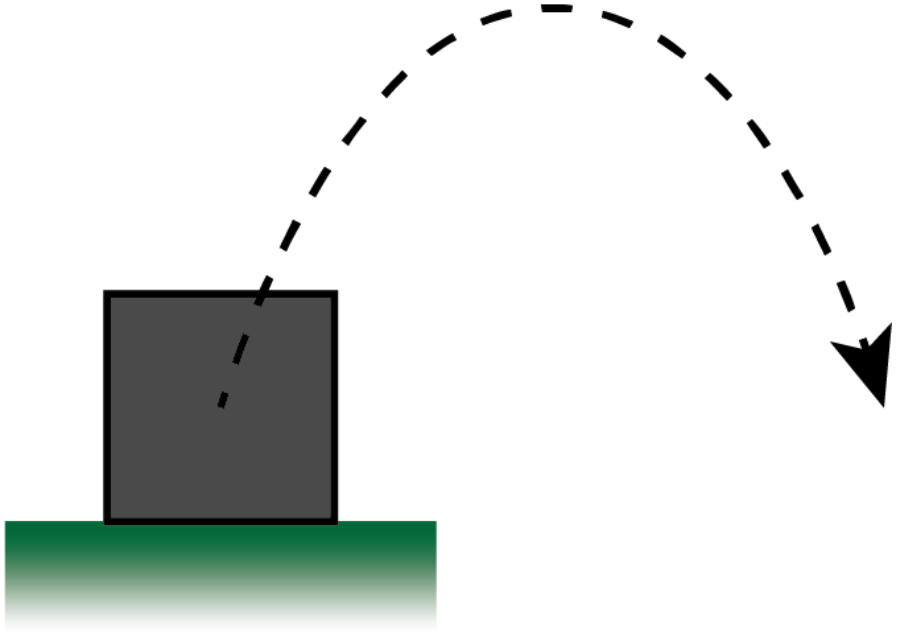


The player can also jump. On keyboard, pressing W/up/space will all result in jumps. On mobile, players can press up on D-pad to jump. Players can jump off the ground and perform a limited number of extra jumps in the air.

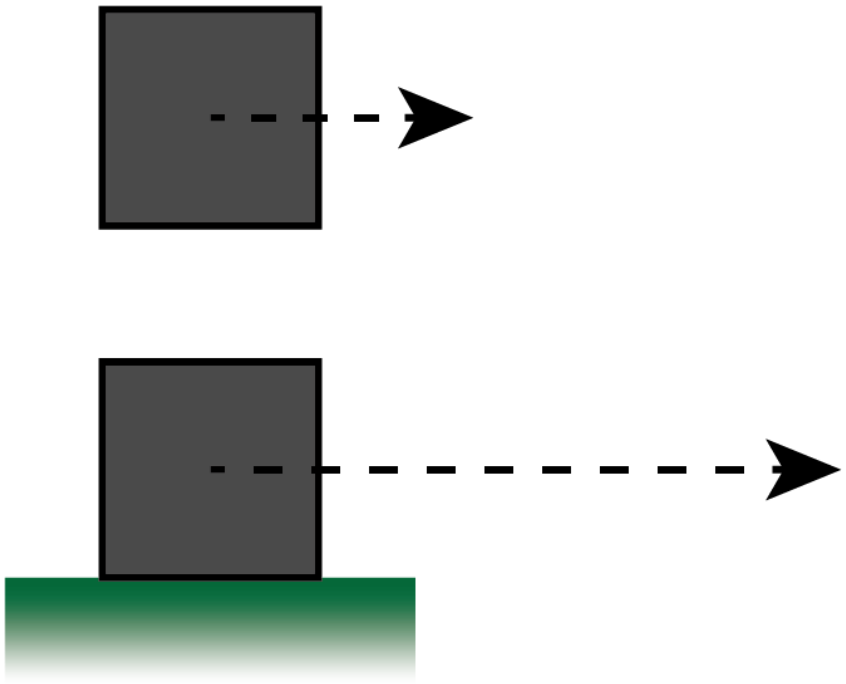


Game Mechanics

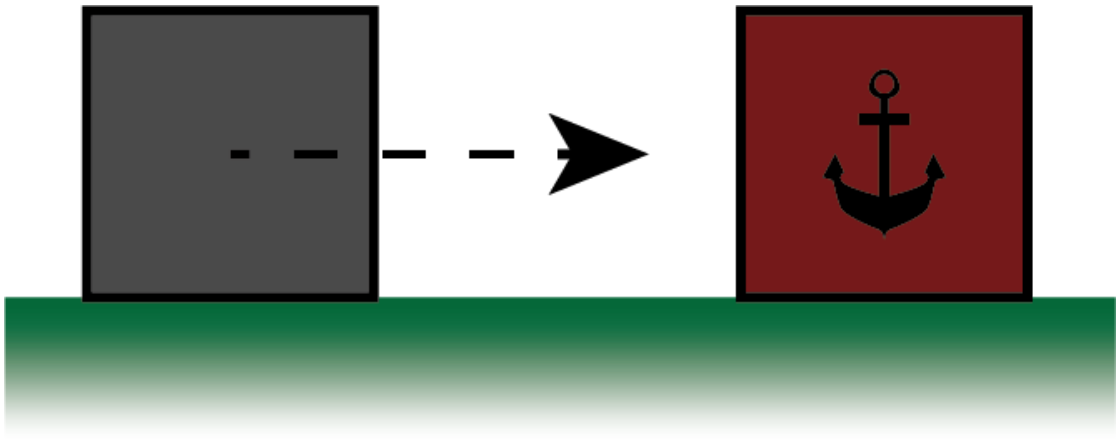
Physics



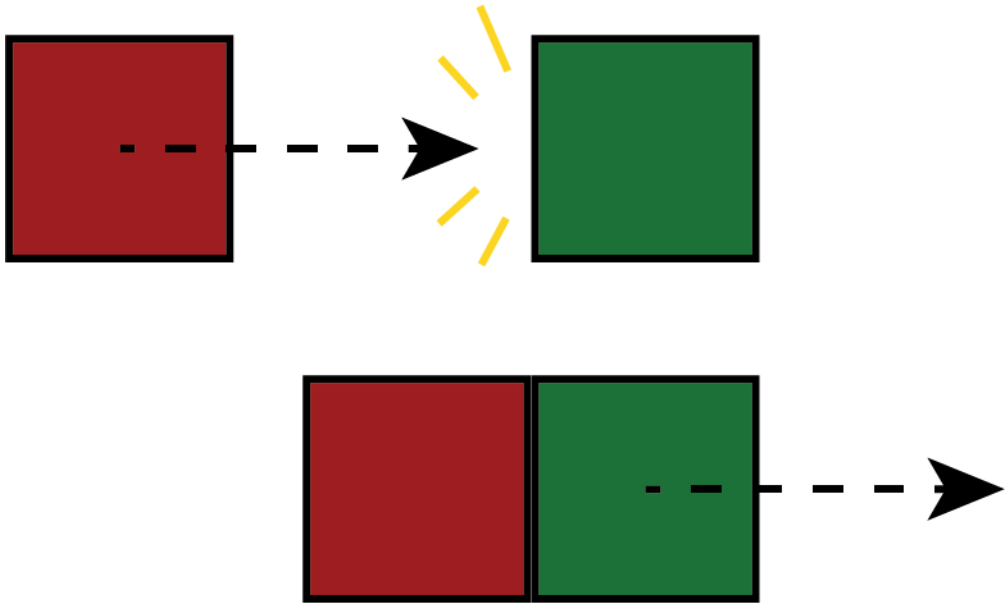
Gravity - When the player jumps, there will be a downward resistance to act as gravity.



Air Control - Changes in horizontal motion will be more limited in the air than on the ground.



Props - There are static props (props with position that do not move), and physics props (props with position, and velocity that do move). Props will have physical properties like elasticity and mass.



Collisions - All objects are treated as boxes and circles. Physics objects that intersect another physics object or static object while moving will collide with them. Momentum is conserved during collisions between two physics objects.

Obstacles

Platforms - The standard platforms will be clouds to fit the sky theme. There will be “trapped” platforms the player must time to pass. Some platforms the player will be able to pass through.

Hostile Obstacles - There will be storm clouds that shoot lighting the player must avoid, and potentially other damaging obstacles.

Objective

Goals and Checkpoints - Each level’s goal will be to touch the phoenix nest at the end of every level. The player must navigate the level and avoid obstacles in order to do so.

Feedback Submission Form

Access - After completing the game, the player will be given an end screen which will then link to the feedback submission form.

Content - The form will be anonymous and will appear after the game's completion to ask for feedback. The form will ask several questions on topics like: how much the user liked the game; things they would like to see changed or added; and general commentary on level designs, difficulty, etc.

Privacy - The submitted forms will be anonymous and only visible to us developers.